

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 09/981,254

REMARKS

Review and reconsideration on the merits are requested.

With respect to **Office Action Summary**, namely the priority claim, the Examiner is requested to verify that certified copies of the priority documents have been received. Block 12(a) was checked, but none of items 1.-3. were checked.

Turning first to the objection to claims 3-10, the informalities noted by the Examiner have been corrected.

Withdrawal of the objection to claims 3-10 is requested.

The prior art: U.S. Patent 5,464,700 Steck et al (Steck); Japanese Published Application No. 09-147,891 Kaneko et al (Kaneko); U.S. Patent 5,336,570 Dodge (Dodge).

The rejections: claims 1, 8-9 and 11 as anticipated by Steck.

Claims 2-7 and 10 as anticipated by Kaneko.

Claims 1 and 11 as anticipated by Dodge.

The Examiner's reading and application of the prior art is set forth in detail in the Action and will not be repeated here except as necessary to an understanding of Applicants' traversal of the rejection which is now presented.

The prior art has been carefully reviewed and the independent claims have been carefully amended to recite specific features not taught nor suggested in the prior art.

Specifically, all elements of the membrane electrode assembly of the present invention are close-fitted into the inside of the seal.

In the method of the present invention, positioning of the elements, that is, the first and second electrodes and the electrolyte membrane, is extremely precise with respect to the seal.

Steck discloses the structure of a fuel cell where gaskets 12 and 14, electrodes 18 and 20 and electrolyte membrane 16 are integrally bonded. However, in distinction to the present invention, electrodes 18 and 20 and electrolyte membrane 16 are simply layered, not close-fitted into the interior of the gasket(s) as called for in the claims herein.

Kaneko also discloses a structure of a fuel cell in which gaskets 50 and 60 and electrolyte membrane 11 are integrally bonded. However, as can be seen in Fig. 2 of Kaneko, electrolyte membrane is not closely fitted into the seal.

In a manner similar to Steck and Kaneko, Dodge also fails to teach the specific feature of the present invention wherein the membrane electrode assembly is close-fitted into the interior of the seal.

Since none of the references include a structure in which all the elements of the membrane electrode assembly are close-fitted in the interior of the seal, positioning of the elements of the membrane electrode assembly in accordance with the prior art cannot be precisely controlled (positioned) with respect to the seal.

With respect to newly added claim 12, gas leakage can be efficiently avoided and the surface pressure exerted on the seal can be dispersed since inner and outer linear provisions are provided.

With respect to new claims 13/14, since the second electrode has a larger area than the first electrode and has a circumference projecting from the first electrode, the circumference of

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the electrolyte membrane closely contacts only the second electrode. As a consequence, stress exerted on the circumference of the electrolyte membrane is reduced and damage and breakage of the electrolyte membrane is inhibited.

Withdrawal of all rejections and allowance is requested.

Respectfully submitted,



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